

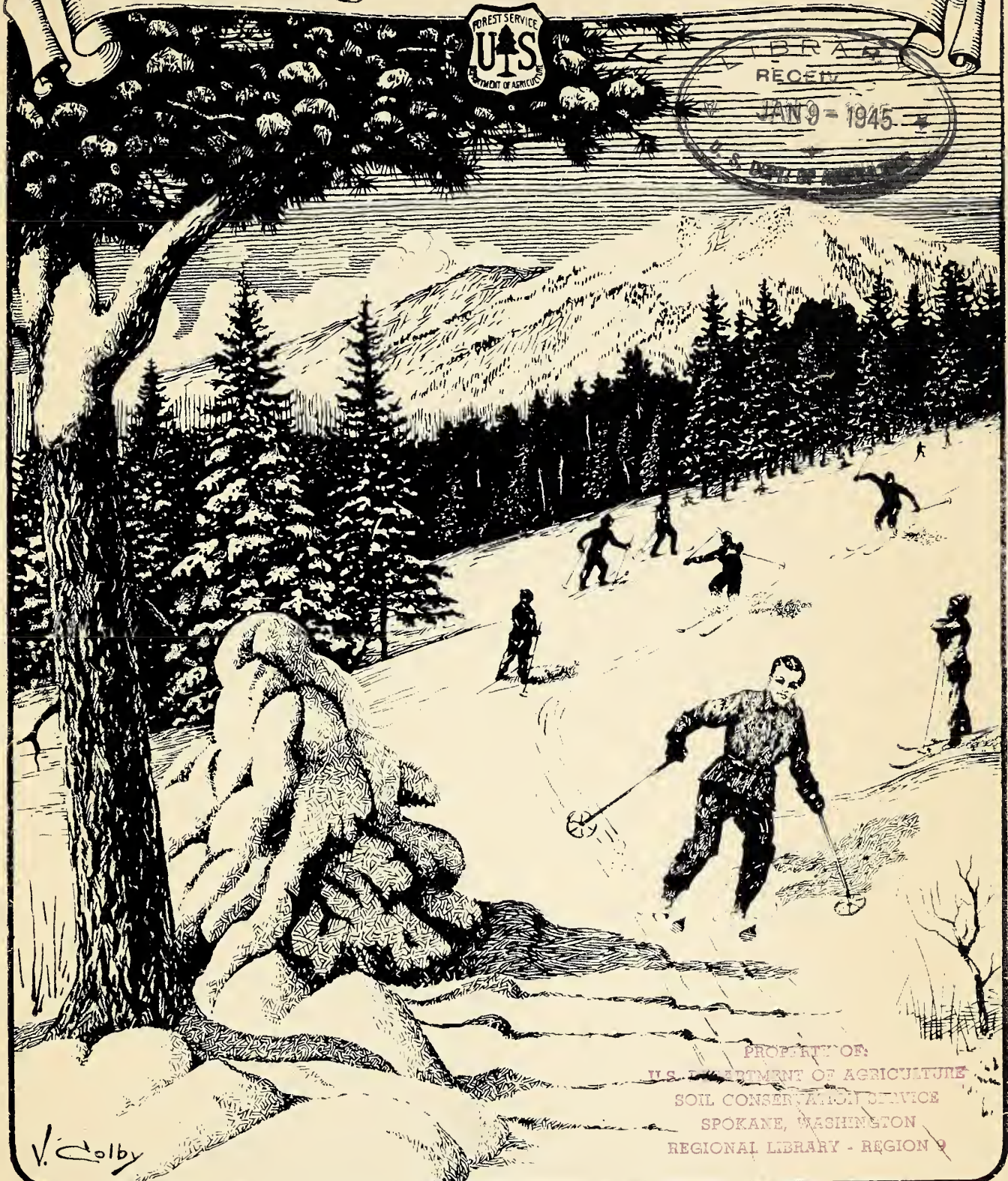
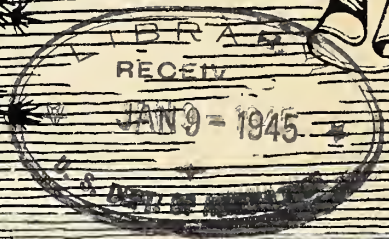
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FIRST QUARTER 1940 REGION 3

CHIEF F. A. SILCOX IS DEAD

Ferdinand Augustus Silcox, Chief of the U. S. Forest Service, died Wednesday morning, December 20, at his Alexandria, Virginia home, after a week's illness. He would have been 57 years of age on Christmas day.

Chief Silcox was born in Columbus, Georgia, December 25, 1882. He was a graduate of the College of Charleston, S. C., where he received his B. S. degree in 1903, with honors in chemistry and sociology. In 1905 he was graduated from the Yale University School of Forestry with the degree of Master of Forestry.

On November 15, 1933, Mr. Silcox became Chief of the Forest Service. His rise to one of this Nation's most respected public service posts is best described by the Service Bulletin of December 4, 1933.

"The summer prior to his graduation from Yale Mr. Silcox worked as a forest student in the Bureau of Forestry of the Department of Agriculture, and was engaged in making a working plan covering approximately 60,000 acres of forest in West Virginia for the U. S. Coal and Coke Company. On July 1, 1905, he entered the U. S. Forest Service as a ranger, having passed the Civil Service examination, and was assigned to duty on what was then known as the Leadville National Forest in Colorado. In September of that year he was placed in charge of the Holy Cross National Forest in that State as acting supervisor and early in January of the next year he was sent to the San Juan and Montezuma National Forests in Colorado to set up administrative organizations. After the completion of this work he served as a Forest Inspector in Washington, D. C., handling special assignments to the western States. When a district office was established at Missoula, Montana, in 1908 he was made associate district forester. He was appointed district forester for the Northern Rocky Mountain region on July 1, 1911, holding that position until 1917.

"Shortly after the outbreak of the World War, Mr. Silcox was given military leave and entered the 20th (Forest) Engineers of the American Expeditionary Force, with a captain's commission. After less than a year's service in this branch, he was selected by the Secretary of Labor and the Shipping Board to head a bureau to handle labor problems at the shipyards at Seattle, Washington.

"Following the war, Mr. Silcox went to Chicago as Director of Industrial Relations for the commercial printing industry, remaining there until 1922 when he became Director of Industrial Relations of the New York Employing Printers' Association. On November 15, 1933, he left the latter position to reenter the Forest Service as Chief Forester, succeeding the late Robert Y. Stuart."

Chief Silcox was a member of the Society of American Foresters and Phi Kappa Sigma. He was one of the Nation's leading exponents for guarding American democracy and working toward a solution of the social ills of the country. He championed the spirit of public service. The Chief's lifetime motto was that whatever the job, "It Can Be Done."

The entire Forest Service grieves the loss of its leader.

OPERATION

PROCUREMENT OFFICE

Progress report for 1939 indicates a substantial increase in Central Purchase warehouse business over 1938. Other Government agencies have increased their patronage of Central Purchase during the year and have indicated their appreciation for saving in time and appropriation expenditures by the opportunity to participate in our facilities.

During the past year Procurement has stressed organization in the warehouse to meet Regional demands in fire control. Equipment has been stocked and arranged for rapid assistance to the field in emergency situations.

Purchasing information files in the Procurement Office have been improved to meet the service objective and to supply needed information to field units.

Thirty-three carload shipments and 735 LCL shipments of warehouse stock were received at Albuquerque and fifty-three carloads of cars, trucks and heavy equipment received, serviced, and distributed by the Procurement organization. Ninety-four carload shipments of supplies were purchased for direct delivery to Forests and other Government agencies. Cars, trucks and heavy equipment received in the Region numbered 192 pieces and amounted in value to \$121,137.82.

Progress has been noted in the Exhibits and Maps, and Paint, Sign and Carpenter shop work.

A new revised up to the minute catalogue is being issued by Central Purchase. Appraised values of items received from surplus lists have been reduced to cost plus handling values for field issue. Surplus and dead stock items transferred to field units and other agencies without reimbursement amounted to an inventory value of \$26,805.70.

INDIAN SERVICE FIRE MEETING HELD AT PHOENIX

Forest Service officials led the discussion throughout the morning of January 6 at the Indian Service fire meeting in Phoenix. Much interest centered around fuel typing as presented by Robert Munro. Ted Bonner presented personnel training methods and explained how plans and procedure were applied last year. The group seemed particularly impressed with the problem method as used in field group training on Iron Creek and Ruidoso burned over areas.

Deputy Supervisor Sizer of the Tonto talked on fire organization and called on Ranger Ray Stewart to describe his cooperative activities with the Indian Service during the past season. Mr. Zeh, Regional Director for the Indian Service, solicited suggestions from Forest Officers for greater cooperation between the two Services in fire control. "Major" Noble of the Tonto warehouse did a commendable job of explaining and exhibiting with the fire control supplies and equipment.

About twenty Indian Service officials from throughout the Region attended the meeting, the main purpose of which was to make plans for fire training conferences to be held prior to the next fire season.

PUTSCH GOES TO WASHINGTON

Llew J. Putsch of the Regional Office, after enjoying the holidays in New Orleans, arrived in Washington on January 7, where he will remain on a two month's detail.

FIRE TRAINING

The field classroom laboratory as a training ground was used again in 1939 for training of selected personnel in fire control and erosion control. Starting in 1938 two groups of Forest Officers were given an opportunity to observe and discuss on the ground the intricate problems of fire control presented by the Iron Creek fire of June 15, 1938 on the Gila National Forest. This year the Santa Fe Forest took advantage of the Falls Creek fire near the Las Vegas District to hold a two-day training and review meeting of local personnel on the burned over area and in September a regional training session was held on the Cedar Creek fire near Ruidoso for a selected group at which both fire control and erosion problems were studied. The net results of such a type of training can only be measured by the increased efficiency by which the job of fire or erosion control is accomplished. Certainly the problem of erosion after a fire and the many rather simple things which may be done to ameliorate it were forcibly brought out by the instructors at the Ruidoso session. Likewise the Regional record of only one extra period fire out of 8 fires over 300 acres in 1939 is an example that the responsible personnel have a definite knowledge of how to control a relatively large fire even under the extreme burning conditions which existed when these fires occurred. The "out on the ground" method of training has gone beyond the borders of the Region. Recently the Fire Control office in Washington suggested that this type of training may be one of the devices which could be efficiently used to reduce the burned over area on our larger fires. In this Region there is a very definite feeling that it has already done so and also that the method may be used to advantage with respect to any kind of resource management training.

WIND MOVEMENT AND FIRE

In response to an inquiry to the Lake States Experiment Station, which has made intensive investigations as to the influence barriers have on wind movement, Director Zon makes the statement that where a barrier offers the same resistance at all levels, it is not surprising to find that with a tree barrier of less than infinite thickness, the trees being centered well above the ground, there is a very definite "draught underneath" and "that any wind striking the crown tends to seek the shortest escape around the obstacle. If the crown extends to the ground, deflection is around the sides, if not, the shortest route may be underneath." This may explain why fire in dense reproduction forming a barrier to the ground, is less rapid in its spread than in cover where there is an appreciable vertical opening near the ground. In fire suppression the rate of spread may be materially influenced by the ground thickness of the cover, and we may expect crown fires more promptly and more rapid spread in those cover types where the ground barrier is of a character which will allow the wind to escape near the forest floor.

EXPERIMENTS ON DROPPING FIRE FIGHTERS

Mr. Godwin of the Division of Fire Control returned to Washington from the Chelan National Forest in R-6, where he spent three weeks last fall with the project group experimenting in the dropping of fire fighters by parachutes from airplanes. During the course of the work a number of very unexpected and favorable results were secured. Up to the time Mr. Godwin left for Washington, the group, consisting of airplane crew, ground crew, and jumpers, had made 35 dummy drops and 30 live jumps. Among the jumpers were two Forest Service seasonal employees. The jumps were made in a wide variety of terrain, cover and altitude and proved that men can be dropped in rugged, timbered areas in remote territory safely and with little difficulty. (W.O. Information Digest)

MR. KIRCHER VISITS WARM SPRINGS

Regional Forester Kircher visited Warm Springs, Georgia last November at the request of the President for advice concerning forest planting stock that might be used in that vicinity. In commenting on this visit, Mrs. Roosevelt, in her column "My Day" of November 27, stated, "I left all at Warm Springs in grand spirits. The President was just starting off with two of the forestry people to look over the woods. No more congenial occupation than that can ever be found for him."

TYSK TRANSFERS

Harold Tysk, junior range examiner, who has been with Region Three for the past three years, transferred to the Soil Conservation Service on January 2. He is to be Unit Conservator at Magdalena, New Mexico. Tysk started on the Tonto N. F. early in 1937 and was assigned to the Regional Office in January of last year for fire visibility mapping work.

LANEY NOW WITH BIOLOGICAL SURVEY

Lou Laney, former Forest Ranger, well known to many of the personnel of Region 3 and who some two years ago transferred to the Soil Conservation Service, is now assistant to Mr. Cates who is in charge of the New Mexico District under Regional Director John Gatlin. Laney's transfer to the Biological Survey became effective December 1.

FIRST INTRODUCTION OF OIL BURNING LOCOMOTIVE

Possibly one of the first oil burning locomotives to be installed by a railroad company for the prevention of forest fires along its right-of-way was the result of the efforts of Supervisor Breen of the Grand Canyon Forest Reserve in 1904.

Under date of October 5, 1904, and as a result of previous correspondence, reports and interviews, the attorneys for the Grand Canyon Railroad (Santa Fe) informed the Commissioner of the General Land Office:

"We advise that we are today in receipt of a telegram from the company advising us that oil burning engine No. 657 will be in service on and after October 7, 1904," and "It is our understanding that the introduction of the oil locomotive will entirely do away with any possibility of forest fires from engine sparks."

Engine 657, if not the first oil burning locomotive to be assigned to use within Forest Reserves, was at least an early pioneer in fire prevention.

FIRE ANALYSIS OF COCONINO FIRES

The Coconino handled 535 Class A, 59 Class B and 3 Class C fires during the past season. An analysis of the 62 Class B and C fires shows that 60 of these were first sighted and reported by members of the protective organization.

Two fires, one in Oak Creek Canyon, and one in the inner basin of the Frisco Peaks, were first sighted by outsiders. These fires were in areas that are "blind" from existing lookouts.

This record indicates a high efficiency in detection, well trained lookouts and good coverage on risk area.

FRED WINN TO WASHINGTON

Supervisor Fred Winn of the Coronado N.F. was in the Regional Office January 5 enroute to Washington where he has been detailed for a month to assist in preparation of data on wilderness areas and wildlife on the National Forests.

PERSONNEL CHANGES

Effective November 16, Robert P. Boone, Range Examiner Regional Office, transferred to Assistant Forest Supervisor of the Cibola National Forest, filling the vacancy caused by the transfer of Harry W. Naylor to the Grazing Service. Effective December 1, Executive Assistant Cox of the Gila transferred to the Sitgreaves, Executive Assistant Gardner of the Sitgreaves to the Apache, Walter B. Dillon from FA to the Gila as Executive Assistant, and Herman Becker of the Apache to FA, replacing Boyd B. Parker who went to the Tonto, replacing Leo E. Anderson who retired December 31.

Ranger Laurence E. Stetz who recently returned from the New England Forest Emergency Project, transferred from the Zuni district on the Cibola to the Verde District on the Prescott. The Zuni District was taken over by Ranger S. R. Servis of the Magdalena District. Ranger John H. Mims moved from the Mountainair District to the Magdalena District and the Mountainair District was filled by Ranger E. W. Cottam. Ranger Zane Smith of the Verde District on the Prescott transferred to the Sandia District of the Cibola.

Ranger J. A. Newton of the Jewett District of the Apache transferred to the Jicarilla District of the Carson and Ranger R. L. Diggs of the Jicarilla District succeeded Ranger Newton on the Jewett District of the Apache, effective December 1.

Ranger Leon O. Hill of the Zuni District of the Cibola transferred to the Red Rock District of the same Forest on November 8, filling the vacancy caused by Ranger Vincent's transfer to Washington.

FAREWELL PARTY FOR RANGER COTTAM AND FAMILY

Jake Williams, manager of the Riedling Fox Farm and Mrs. Williams, gave a farewell party for Ranger Ed Cottam, Mrs. Cottam and daughter, Maxine, January 16. Sixteen friends and neighbors gathered and assisted in reducing the size of a delicious 16 lb. turkey with all the "trimmings". Bridge was played after dinner.

SIMPSON AUTHORS ABLY

The January 1940 issue of FIRE CONTROL NOTES gives first position to an article by Alva A. Simpson in charge of Fire Control, Region Three, entitled, "The Burned-over Area as a Classroom in Fire-control Training".

Describing the training method used in this Region, the article is a model of concise presentation (right in line with the slogan, "Keep Them Little!").

Elsewhere in the same issue are notes about the Ruidoso Training Session last October (page 8) and about fire prevention on the Coronado (page 15).

PALMER CHAIRMAN A.L. SUB-COMMITTEE ON CONSERVATION

Mr. Hollis S. Palmer, of the Tonto National Forest, has been appointed Chairman of the Sub-Committee on Conservation of the American Legion of Arizona. Because of the effective work accomplished by Mr. Palmer last year with the Committee on Conservation, he has been placed in this position by William R. Bourdon, Department Commander.

MR. UPSON RETURNS TO WASHINGTON

Director Upson left for Washington January 3 to again take up his temporary assignment with the Associate Chief on matters connected with the work of the Joint Congressional Committee on Forestry.

TIMBER MANAGEMENT

TIMBER MANAGEMENT SUMMARY FOR 1939

The growing of a timber crop is a long-time game. The life of a tree is some 4 to 6 times the average working life of the Forester and unless a selection system of cutting is used, the man marking the original stand for cutting, never gets a chance to see the final result of his work as expressed in the next timber harvest. The readers of the Pioneer can appreciate this, and the writer has heard a number express the wish that they could again see some of the areas on which they formerly worked. The men who in 1909 worked on the sale for the Saginaw and Manistee Lumber Company near Wing Mountain west of Ft. Valley (then on the Tusayan, now on the Kaibab Forest) will be interested to know that a second cut of timber has been made on 500 acres this past fall and from this area, after thirty years, about 1,200,000 feet were removed. A fine stand of healthy, fast growing trees were reserved and the openings left by the first cut are now well stocked with young growth. This harvest proves the initial soundness of the timber management initiated on this area in the early days of Service before the men had experimental results as a guide. Their original ideas are now known to have been sound. This area is now a part of the experimental forest managed by the Southwestern Forest and Range Experiment Station and the area will be devoted to future experimental work.

A big change in the management of southwestern timber is made possible by the almost complete change from railroad to truck logging. This change permits a light cut to be made and allows for the leaving of a heavier stand of timber on the cutover area, something very much to be desired where the stand of timber was such as to make a heavier reserve desirable. It is expected that this heavier reserve stand will yield a return cut in a much shorter interval. Where formerly it was computed that an operation could not come back short of fifty years, it is now computed that this can be shortened to at least 40 years and possibly less. Under the lighter marking system the cut would consist of the portion of the stand which is now growing at an extremely slow rate and that portion of the stand largely above 30 inches in diameter where losses exceed growth. The selection of these slow, or non-growing portions is made possible by a study, the results of which gave data by which ponderosa pine stands may be divided into four broad age classes. Age Class I corresponds roughly to the pole classification; Age Class II formerly included in the Black Jack and intermediate class; Age Class III, Mature Yellow Pine and Age Class IV, Overmature. Each of these age classes is further divided into four thrift classes designated "a" to "d" inclusive, the "a" class being a full foliated and full crowned tree and the "d" a thin foliated, short crowned tree. Previous experimental work shows that other things being equal, growth is fairly proportionate to the crown surface and the above classification when coordinated with diameter, permits the timber marker to select for removal that portion of the stand which is putting on wood at too slow a rate to make it profitable for retention.

R-3 TIMBER CUT

The cut from the National Forests of Arizona during the first half of the fiscal year 1940 under commercial and cost sales and exchange was 44,247 M ft., valued at \$103,609.53. This was in excess of the first half of the fiscal year 1939 when the cut was 38,352 M ft. valued at \$84,730.83.

The New Mexico cut during the first half of 1940 amounted to 21,894 M ft. valued at \$42,393.84. This was a decrease from the first quarter of 1939 when the cut amounted to 27,074 M ft. valued at \$54,050.18. The total cut in volume and value in the two states, however, was slightly greater in 1940 than in 1939.

The number of sales so far in 1940 is 1,683. The number for the same period of 1939 was 1,949.

ARTICLE BY G. A. PEARSON APPEARS IN THE TIMBERMAN

"A Second Cut in Ponderosa Pine" is the subject of an article prepared by G. A. Pearson which has been submitted to the Timberman. The article which carries 6 photographs illustrating the logging methods and the character of the residual stand, describes the second cut made in the fall of 1939 on the Wing Mountain plots of the Ft. Valley Experiment Station. These plots, cut first in 1909, yielded over a million feet when recut. The gross increment expressed in value is computed at 27¢ per acre per year.

FOREST DESTROYING INSECTS

The annual Forest destroying insects size-up, compiled from Bureau of Entomology representatives examinations and reports from the Forests, shows that except for the Coconino, Kaibab and Prescott, bark beetle damage is normal. On these three forests more than normal damage was suffered and control work on the Horsethief area of the Prescott is being conducted. Tip moth and spruce bud worm damage was normal. The tent caterpillar infestation, severe on the Carson and Santa Fe a few years ago, is reported back to normal, except on a few limited areas. The cone weevil caused considerable damage to the pinon and ponderosa pine seed crop throughout the Region.

ADMINISTRATIVE PERMITS ISSUED

Two administrative use permits were issued January 17, one for 7,000 juniper fence posts and 30,000 juniper fence stays. The permit was to the Soil Conservation Service and the material will be used in fencing the Antonio Sedillo Grant. The Biological Survey secured the other permit for 10,000 juniper fence posts, 500 of which were for posts 8 ft. long and 6 inches top diameter. The Biological Survey will use the posts in the development of the Bosque del Apache Federal Refuge.

The above material will be secured on the Chupadera Mesa on the Cibola.

"LUMBERING IS SCIENTIFIC"

In the Arizona Republic of January 14, Mr. F. S. Palmer of the Tonto National Forest has a very interesting article entitled "Lumbering is Scientific", describing the change from old wasteful methods of timber cutting and the modern methods of today, explaining in a very clear way the Forest Service plans for timber use being kept on an equal footing with timber growth.

LARGEST OAK TREE IN THE WORLD

Sir Joseph Hooker Oak, the largest living oak tree in the world, estimated to be 2,000 years old, is situated in Bidwell Park, near Chico, Calif. It is named for Sir Joseph Hooker, famed English botanist.

Its limbs, under which 2,000 persons can stand at one time, are now supported by concrete standards, and around it a cement railing has been put up to keep automobiles away from its base. Six feet from the ground the tree measures 26 feet in circumference.

California Grange News.

HOLLAND IS MARKET FOR NEW MEXICO NUT

The Albuquerque Tribune of November 1 stated:

"A letter to the Pinon Nut Co., Albuquerque, from Francios Manchen, foreign sales manager of food-stuffs, Hague, Holland, informed the concern here that they were prepared to market salted pine kernels in foreign countries.

The Holland concern not only covers the Netherlands but is also represented in the United States by several well known American companies which include General Food Sales Co., Inc., and Campbell Soup Co."

AUSTRIAN PINE ON THE CIBOLA

Mr. McCommon, Superintendent of F-8-N, located in the Sandia Mountains brought in a number of evergreen branches which had been requested by a member of I&E to be used with a talk before one of the City schools. In looking over the specimens, it was found that one was of a species foreign to R-3. After all of the experts examined the specimen, Dr. Gill of the Bureau of Plant Industry came to their rescue and pronounced it Austrian pine. L. J. Putsch explained its presence by the fact that in 1908 seedlings from the Las Vegas Nursery were transplanted in the Sandias and it is presumed that the nursery stock was not all Region Three seed.

NEW INDUSTRY FOR THE SW. BEING INVESTIGATED

A memorandum from the Tonto states that a representative of the Crown Cork and Seal Company of Baltimore, who controls cork imports in the United States from European countries, is visiting Arizona in order to look into the possibilities of growing cork in the Southwest. Cork bark oak (*Quercus suber*) trees growing on the grounds of the Biltmore Hotel at Phoenix, at the University of Arizona at Tucson, and at Craig's ranch, southwest of Globe, have been examined and it is found that the growth of these is at least twice as fast as the growth of this tree in Spain and is of a better quality.

It appears that the dealers are experiencing difficulty in securing sufficient quantities of cork from Spain due to the European situation and while it will require 20 to 25 years to produce commercial bark in this country, it is their belief that future demands and other conditions warrant immediate action to provide a supply for the future in this country. The company is endeavoring to secure a quantity of acorns from Europe for experimental use in the United States.

The Forest Service is interested in the possibility of an experimental planting of the cork bark oak on National Forest land in this Region, for if successful, this would develop an industry which would provide additional employment for labor and also provide for increasing the products grown on land, the highest use of which, in certain cases, is evidently timber production.

CHAMPION PAPER AND FIBER CO. SCOUTING FOR ENGELMANN SPRUCE

Mr. C. E. Smith of the Champion Paper and Fiber Company of Canton, North Carolina called at the Regional Office on November 24 to inquire concerning the possibility of securing Engelmann spruce. Mr. Smith stated that the material was wanted for their Houston, Texas plant. Material from five to eighteen inches in diameter, cut in five foot lengths, could be used. Material over eighteen inches in diameter would have to be split. He also stated that they would not want to set up an operation for less than 800 cords per month.

The office of Forest Management will canvass the situation on the National Forests to determine whether there is a supply of spruce which it is believed can be cut safely and Mr. Smith advised.

TEN YEAR INCREASE IN VOLUME ON SALE AREA

The increase in volume of the stand during a ten year period since cutting was determined for two sections on the Kaibab by Ranger Johnson and the sales personnel. The data were as follows:

	<u>Volume bd. ft.</u>		<u>Net Volume In-</u>	<u>% Increase</u>
	<u>1939</u>	<u>1929</u>	<u>crease in 10</u> <u>years - bd. ft.</u>	<u>in 10 years</u>
T.30 N. R.3 E. Sec. 22	1,623,240	1,213,100	410,140	33.8
T.30 N. R.3 E. Sec. 27	2,211,950	1,375,210	836,740	66.8

The annual growth of 3.3% and 6.6% is good. The total mortality during the decade on Sec. 22 was 26,790 ft. and on Sec. 27 only 3,590 ft.

The changes in the stand on the two areas are of interest.

	<u>1929</u>	<u>1939</u>
	<u>Number</u>	<u>Number</u>
Sec. 22 - Seedlings, saplings and poles to 11" d.b.h.	5,606	26,136
Trees 12" to 20" d.b.h.	4,301	4,183
Trees 21" to 27" d.b.h.	1,622	2,207
Trees over 27"	154	253
Sec. 27 - Seedlings, saplings, and poles to 11" d.b.h.	2,022	12,420
Trees 12" to 20" d.b.h.	4,803	4,630
Trees 21" to 27" d.b.h.	1,891	2,800
Trees over 27"	210	420

GLUED LAMINATED CONSTRUCTION OF ARCHES

The arch, a means of supporting loads over an opening, has been used for centuries in the building of bridges and other structures. Stone was used in some of the earlier arches, later metals, concrete and other material have come into use. Wood was not used for this purpose due to the difficulty of getting sizes and curvatures from single pieces of material. Later arches were built up of pieces bolted or nailed into a unit. These were not entirely satisfactory. Glues have improved greatly and make it possible to construct more satisfactory units. The most extensive use of glued laminate construction has been in Germany, Sweden and Switzerland and has only recently been introduced into the United States.

Definite information is lacking on the first uses of glue in structural members here, but apparently no extensive development occurred prior to the installation of glued laminated arches in the Service building at the Forest Products Laboratory in 1935, where the spans were 46 feet. A span of 150 feet is in the Tennis Hall at Falkenburg, Sweden.

Now that good glues are available, arches of efficient and artistic design are possible. These have been studied by the Forest Products Laboratory and Technical Bulletin No. 691 entitled, "The Glued Laminated Wooden Arch" by T. R. C. Wilson, Senior Engineer, is available to all persons interested in this form of design. The bulletin is well illustrated by photographs of actual examples of construction in which glued laminated arches are used.

CALL FOR LAYOUT AND LANDSCAPING PLAN

At the request of Mr. Frank Morrow, manager of the Ojo Caliente Hot Springs Resort, the Carson made a layout plan for landscaping the resort with native shrubs and trees. Most of the planting stock will be obtained from the Carson National Forest.

SUBSTITUTE FOR BRIAR IN THE MANUFACTURE OF PIPES SOUGHT

Inquiry has been received from a pipe manufacturing firm of West Allis, Wisconsin as to native woods suitable for pipe manufacture, listing manzanita root, the burl of red shank, madrone and Ceanothus spinosus. We were unable to identify red shank and Ceanothus spinosus does not occur in the region. Efforts are being made to obtain a supply of the other species listed for experimental purposes. If any forest officer has experimented in pipe making and knows a promising native species not listed above, the Regional Office will appreciate such information.

THE WEEPING WILLOW

The following bit of history as condensed from the October issue of the Reader's Digest on the origin of the weeping willow tree in this country should be of interest to all tree lovers.

Early in the 18th century, a woven willow basket filled with figs was sent to Lady Suffolk in England from a friend in Smyrna. The poet, Alexander Pope, was present when the gift arrived in England, and as a gallant gesture he drew one of the withes from the basket with the remark: "Perhaps this will produce something we have not in England." He had it planted at his place on the banks of the Thames River, and it grew into a fine weeping willow tree.

Years later a British officer, leaving for the American colonies, took a twig from this tree, and carried it wrapped in oiled silk, throughout the Revolutionary War. After the war he presented this twig to John Curtis, a son of Martha Washington. The twig was planted on the Curtis Estate in Virginia, where it took root and became the ancestor of all weeping willow trees in the United States.

Although not a commercial tree the weeping willow has a grace and beauty that makes it outstanding as a landmark or shade tree in many homesites in America. (California Ranger)

LUMBER PRODUCED IN ARIZONA AND NEW MEXICO

During the calendar year 1938, Arizona and New Mexico produced an aggregate of 243,376 M feet of softwood lumber or 1.3 percent of the total production of softwood lumber in the United States in the same period. The percent of different species produced in the two states was as follows:

	<u>Ponderosa pine</u>	<u>Douglas fir</u>	<u>Spruce</u>	<u>White fir</u>
Arizona	99.9	00.1	none	less than .1
New Mexico	77.7	16.9	1.5	3.9

While the total production of softwood lumber amounted only to 1.3 percent of the national production, the two states produced 7.9 percent of the total cut of ponderosa pine in the nation.

LINCOLN N. F. FURNISHES SHELTERBELT WITH NOGAL NUTS

Sometime ago the Prairie States Forestry Project requested this Region to secure nuts of nogal (*Juglans rupestris* major) to be tried as a shelterbelt tree in the cottonrot areas of Oklahoma and Texas. Word comes from the Lincoln that the nuts have been collected and are being shipped to Mr. Nelson, State Director of the Prairie States Forestry Project in Oklahoma.

WILDLIFE AND RANGE MANAGEMENT

USE OF HUNTER CHECKING STATIONS IN GAME MANAGEMENT

During the hunting season of 1939, 27 hunter checking stations were operated in Arizona and New Mexico. This job was one of general cooperation with both of the State Game Departments, the National Park Service, Division of Grazing, Soil Conservation Service, and Forest Service furnishing CCC enrollees and supervisory personnel.

The object of the work was to secure reliable information by all areas of the number of big game animals and wild turkey taken, the number of hunters, the size or age classes of deer and elk, and the sex and age classes of wild turkey.

Through the 27 checking stations operated, and no attempt was made to cover the entire Region, there were 14,700 hunters contacted out of an estimated total of 32,000 hunters in both states. This shows the fine educational opportunity of these checking stations when it is realized that 14,700 individuals passed through these stations.

The kill records of these stations show that 3579 deer were measured as to antler beam, antler spread and antler points out of an estimated total kill for the two states of 5,792 bucks. This is over a 56% sample of the total kill. When such a sample, along with antler and body weights can be obtained, a reliable cross section of the buck population as to numbers, size and quality is obtained. From such samples obtained each hunting season in the future, the size or age classes of the deer crop can be determined, and we can have a good idea of how the breeding stock is holding up under shooting.

Of special interest is a trial made to obtain weight records of the bucks killed this year. There were 1609 return postal cards given out to successful hunters on which they were requested to enter the dressed weights of their bucks after weighing them and mail the card. Of the 1609 cards issued 845 or 52% of the cards were returned. This also gives a good sample of the cross section of the deer killed. Because deer continue to increase in weight until they die, it is readily seen that weight records may be used as age records when enough information is obtained as to the yearly increase in weight. Some work is now being done on the Kaibab (North) through fawn tagging and study of lower jaws by which we hope to tie weights and ages together. When this is accomplished it will be possible through weight records to reliably state how our deer herds are standing up by the percentage of the ages in the annual kill.

Deer and wild turkey spot maps made at the checking stations of locations of deer and wild turkey killed are interesting. These maps at the end of the hunting season show in places a heavy deer kill or a big blank space indicating a light kill or an area not easy to get to in a car. These maps are interesting to show areas of game production, game harvest, and the contribution made by game refuges.

The wild turkey kill records are of special interest in that out of 415 wild turkeys checked at the stations, 207 of them were adults and 208 of them were immature or birds of this year. This points to a very low production rate for wild turkeys this year when the adult : young ratio is 1 : 1. Apparently the wild turkey cannot stand a heavy hunting pressure and accurate information of production and kill is needed to iron out some of the management methods for wild turkey.

There were 101 elk records made at checking stations in Arizona. The records of the Coconino Forest show a high percentage of young bulls in the kill which means that the hunters like the younger bulls best for venison. The elk herds continue to spread and increase slowly from the centers of distribution, and if the rate continues, elk hunting will be had throughout the ponderosa pine type.

We have been pleased with the work of the hunter checking stations and the hunters like them also; so we have hopes of continuing their operation and their usefulness as a part of the game management set up.

THE EROSION PROBLEM AREA SURVEY

During the summer of 1939 plans for a service-wide problem area erosion survey were issued. It was planned that this survey would serve to classify lands into three classes according to the status of accelerated erosion existing upon them. Recognition was given to normal erosion but it was not broken down into classes. An attempt was made to draw a distinction between those areas where erosion is a current problem and those where the natural balance has been restored by management practices after having been lost for a time through some form of use or abuse.

All lands lying within National Forest boundaries came within the scope of the survey as did also those desirable for early acquisition and those outside of boundary lines which exert a direct influence on the erosion problem within the boundaries.

Some delay was caused in getting the survey started in Region 3 by the length and severity of the fire season which extended well into the fall. The progress, since initiation, has been very good and the field work stood almost completed at the end of the year. Reports from eight forests had been submitted at that time.

The work has been accomplished by each Ranger on his own district working under the supervision of, and with aid from, a staff man on each Forest.

The undertaking proved rather large and the willingness with which it has been carried out can be accounted for by the almost universal opinion among the field men that it was a worthwhile and much needed survey. Its great educational value has also been recognized.

A large task yet remains in the final checking, consolidating and editing of the survey, and the preparation of final maps from the work maps. This work is to go forward as rapidly as possible in the Regional office. Reports have been designed to provide for coding and this will be handled by the Washington office.

ARIZONA 1940 BIG GAME SEASONS

According to the Phoenix Gazette of December 15, the Arizona Game and Fish Commission voted to hold separate fifteen day hunting seasons during 1940, with the State to be divided from East to West along U. S. Highways 60 and 70 and State Highway 62. North of the "line", the season will be from November 1 to November 15. Below it, the dates will be November 16 to November 30. During the 1940 season, blacktail deer will be fair game below the Gila River for the first time in many years. It has also been decided to permit another javelina season from February 22 to March 22 in five counties.

MYSTERY DEER

According to the Arizona Daily Star of October 29, for years scientists have contended that old timers and pioneers didn't know what they were talking about when they said that Arizona had a tiny variety of deer which is a species of its own, but Mrs. Gambrell, according to Professor A. A. Nichol, wildlife expert of the U. S. Park Service brought down the first concrete record of the shooting of a species close to that of the Sinaloa whitetail. The original description of a Sinaloa whitetail was obtained in 1895 when a hide was brought up from the interior of Sinaloa, Mexico.

The little buck killed by Mrs. Gambrell weighed only 71 lbs. with head and hide and is believed to be seven or eight years old. Its dark horns have no real prongs but a sort of nubbin offshoot. Its one characteristic is that its brilliant red tail, white underneath, remains red winter or summer. It is the tail which has caused it to be called the "red Sinaloa deer." The wildlife specialist added that this specimen will find its way to the Washington National Museum as an important contribution to the American Wildlife annals. This deer was killed a short distance from the Arizona-Mexican border.

KAIBAB BREAKS ALL-TIME RECORD IN BIG BUCKS KILLED

The Kaibab reports that the record of one buck weighing 247 pounds, established in 1937, was broken three times last year with the new Kaibab all-time record of 268 pounds.

Records compiled during the 1939 hunt show that 1,085 hunters took 693 deer or 64% of the hunters were successful. This record is not as high as in 1938 because of the warm, dry hunting conditions but corresponds closely to that of 1937 when weather conditions were much the same.

Hunters came from the following states: Arizona, 970; California, 84; Oklahoma, 17; Texas, 5; Minnesota, 3; Virginia, 2; New Mexico, 2; Missouri, 1; Iowa, 1.

HE DIDN'T READ THE CCC SAFETY REGULATIONS

Ranger Ross of the Minidoka Forest reported the following item to the Minidoka Messenger:

"Last week Supervisor Price and I found a dead beaver, evidently a victim of the hazards of falling timber. The aspen tree this beaver was working on had lodged in an adjacent tree, and while engaged in cutting the tree free from the stump the tree slipped off the stump pinning one hind foot of the beaver to the ground. Here it died from exposure and starvation. This is the first time in my experience that I have heard of such an accident to beaver, though humans often get caught by falling timber."

DAILY NEWS - INTERMOUNTAIN REGION

ELK PLANT ON TRES PIEDRAS DISTRICT

Associate Range Examiner Bolander assisted the State Game Department the latter part of October in liberating two pair of elk that were brought in by truck from the Goddard Game Preserve, of Ardmore, Oklahoma. They were young and in excellent condition and were placed near the site of the old Cow Creek Ranger Station. When the truck appeared it bore the legend on its side of "Frank Buck's Wild Animals." The reception line stood aghast and expected any minute to hear the roar of a lion or to see a black leopard or baby panda come tumbling out of the truck. However, when the door was opened four elk stepped placidly out. The truck had been used to transport some of Frank Buck's famous animals into Oklahoma.

COYOTE WEIGHTS

In the California Ranger of January 19 are some interesting statistics on the weights of coyotes. Of 70 males caught during the period January to October, 1939, the average weight was 23.5 pounds. Sixty-seven females averaged 18.8 pounds. These weights are for animals one year old and over. The largest animal caught, a male, weighed 33 pounds.

In talking to Mr. Cates, District Agent of the Biological Survey for New Mexico, he states that while a complete study has not been made of weights in New Mexico, the coyote here will outweigh his California brother and sister by about five pounds.

AN EXPENSIVE HUNTING TRIP

The loss of their car and camp by two hunters and a boy near Magdalena presents an unknown cause for the fire. A telephone call about 5 p.m., November 7 to Ranger Gibson reporting the incident and calling for an investigation, resulted in a trip to the scene of the accident. Investigation indicated the probability that the fire originated in the car which had been left in camp after the hunters had eaten a cold lunch. Neither hunter smoked, and the campfire showed no evidence of having caused the fire. The loss was almost complete, including everything except the chuck box and a couple of camp chairs. Two shotguns and a rifle were burned. Returning the hunters to Magdalena, Gibson sped them on their way by bus to Albuquerque.

AVERAGE CATCHES

The quality of the fishing in the southwest varies little regardless of the locality according to the following table showing some average catches per hour, based on studies in Arizona and New Mexico:

	<u>Number</u>	<u>Year</u>
Pecos River - Santa Fe	1.4 fish	1939.
Tonto Creek - Tonto	1.39 "	1936
	1.36 "	1937
Horton Creek - Tonto	1.61 "	1936
	1.36 "	1937
Willow Creek - Gila	1.98 "	1939

REFUGE CREATED

According to the Associated Press, President Roosevelt has signed an order creating the Bosque del Apache National Wildlife Refuge in New Mexico. The order sets aside approximately 60,267 acres in Socorro County for use by the Department of the Interior as a refuge and breeding ground for migratory birds and other wildlife.

The location of this refuge is about fifteen miles south of Socorro, New Mexico.

HUNTERS GET WRONG TURKEYS

This story comes from the Carson country. Two prominent young men of Taos, accompanied by their wives, went turkey hunting during the big game season. They returned to Taos, each with the limit. This caused considerable excitement as many hunters had failed to get theirs. However, later it was found that a small rancher living in the mountains not far from Taos was short eight turkeys. The result was that the hunters not only had to pay for their kill but also are getting a lot of razzing.

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RECREATION AND LANDS

ROBERT MARSHALL PASSES AWAY

Robert Marshall, Chief of the Division of Recreation in the Forest Service, died November 11 on a train on his way from New York to Washington. His age was 37.

Mr. Marshall was a graduate of Syracuse University where he studied forestry, afterward obtaining the degree of Doctor of Philosophy from Johns Hopkins University. He went to Washington in 1931, after having spent 15 months above the Arctic Circle in the Alaskan village of Wiseman. From his experiences there he wrote, "Arctic Village." In 1933 he was appointed Chief Forester of the Indian Affairs Bureau and in 1937 was appointed head of the Division of Recreation and Lands in the Forest Service.

Gifford Pinchot paid the following tribute: "Bob Marshall's death is a loss that is hard to talk about. He was generous, fearless, tireless, and one of the greatest woodsmen and mountain men of his time. He gave himself to the service of his country in the finest spirit, and what he accomplished in Forestry and the conservation of natural beauty out of doors and in many other ways was worthy of the man."

Chief Forester Silcox said: "He had a deep, passionate feeling for the people of low income, and possessed vision, understanding and courage. We feel his loss deeply."

Mr. Marshall was known to many in Region Three as he visited here last summer, and it is felt that the Service has lost a valuable officer and friend.

LANDS

The 1939 year for this office opened up with the detail of J. A. Adams to the Interdepartmental Rio Grande Board as Acting Executive Officer to assist them in getting under way with an integrated program and give them additional time in which to perfect their administrative organization. Roger Morris was brought in from Santa Fe to assist Strickland in acquisition and land use planning work.

Important progress was made in acquisition of a portion of the old Sacramento Land and Cattle Company lands in the Lincoln and with the instigation of the Gross-Kelly exchange on the Santa Fe, both of them important and valuable consolidations. Both are well under way and their early completion is anticipated.

Two socio-economic studies were completed which it is hoped will be valuable to future administration and acquisitions. The emphasis upon land use planning in the form of correlated resource plans as to production and marketing expressed as units of human livelihood is developing, although rather slowly. County planning boards came in to a more active status in both Arizona and New Mexico and the New Mexico State Board has become active. While little has been formally initiated in our own office or emanated therefrom the matter has been under consideration and plans have been made to swing into action in 1940. In this same connection more activity is anticipated upon inter-bureau projects and studies instigated and directed by the Rio Grande Board. One such dealing with the Zuni Mountains and adjacent areas is already under way.

RECREATION BELIEVES IN SANTA CLAUS

As the "tally-wacker" got around to clicking off another year and the figures for a fresh decade began to show, Recreation reviewed its 1939 New Year's Resolutions and began to calculate the probabilities for "Forty." When it comes to "probability" calculators, we claim to be among those present, because probably no living calculator has been out-calculated as often as we have.

Nevertheless, when it comes to Forest Recreation Plans, 1939 doesn't figure out so badly. In January, with the whole year ahead, we figured to complete the revision and rewriting of the plans on the Apache, Carson, Santa Fe, Coronado and Tonto and to start, and if possible, complete the job on the Coconino, Crook, Kaibab, Lincoln and Prescott.

Now in the Christmas sock we found as presents from the Supervisors and their personnel, from the "Specialists", from Drafting and from the typists, Forest Recreation Plans and maps for the:

Apache	- Complete.
Carson	- Two-thirds complete, remainder in rough draft.
Cibola	- Done in 1938.
Santa Fe	- Half, maybe more, in rough draft.
Coronado	- Two-thirds complete, remainder in rough draft.
Tonto	- Complete in rough draft.
Crook	- Complete in rough draft.
Coconino	- Two-thirds in rough draft
Kaibab	- Excused. Merry Christmas to all.
Lincoln	- On deck for second quarter of "Forty."
Prescott	- On deck for first quarter of "Forty."

So, don't look now, but our 1940 calculations are beginning to include the probability of getting the Santa Fe, Lincoln, Prescott and Kaibab Forest Recreation plans rebuilt in time for the Fourth of July, the Sitgreaves for July 24th and of making friendly advances toward the Gila. How are you all calculatin'?

MINERAL CLAIM HANDLED

On December 11 hearing was had at Tucson in the case of Louis des Cognets involving a mining claim about eight miles from Tucson, which the Forest Service protested on the ground of lack of discovery and holding the land for residence purposes. The case was vigorously contested. Mr. Louis des Cognets is a contractor from Lexington, Kentucky who spends a part of his time in Arizona.

ADAMS RETURNS TO LANDS

A. M. Hurt has been appointed executive officer of the Federal Inter-departmental Rio Grande Board succeeding John A. Adams who has been acting executive officer for the past year and half or more.

Adams will resume his former work in Lands, spending a few days assisting Mr. Hurt in familiarizing himself with details. Adams will also remain on the Board as the Forest Service representative.

MT. UNION LOOKOUT VISITED BY HOLLYWOOD BROADCASTER

Miss Grace H. Sparkes, Secretary of the Prescott Chamber of Commerce, wrote Mr. Paul Watson, fire lookout on Mt. Union, as follows:

"Dear Mr. Watson: We wish to compliment you upon the very splendid manner in which you received our party during their recent visit to your station.

"Mr. Roy Hewitt, resort broadcaster for Warner Brothers' famous broadcasting station at Hollywood was very much impressed with the magnificent scenic view obtained from the tower and was particularly anxious that we should tell you how much he enjoyed his visit with you."

TRIPLE PLAY

How a Forest Recreation Plan can be a triple play, benefiting fire control and I&E as well as recreation development, is shown by the following excerpt from the tentative draft of a recreation plan for one Forest in R-3:

VISTA POINTS. As an aid in the utilization of these scenic assets, this plan lists and locates a considerable number of vista points. Most of them are on or easily reached from existing roads. A few are already developed, some are naturals, others need deliverance. Needed improvement work is to be done in connection with road maintenance or construction in accordance with pre-determined plans. The following development scheme will be followed:

1. Parking space will be amplified or created. The number of cars to be accommodated will depend upon the anticipated use.
2. Safety devices such as guard rails will be used when considered necessary.
3. Window clearing will be done where needed. Material to be removed will be marked by a member of the Supervisor's office, or other competent planner.
4. Name signs will, as funds permit, be erected to mark developed overlooks.
5. Layout design will be kept simple. Provision for water supply if available, and for a picnic set, if desirable, can be included at major overlooks.

LOOKOUT TOWERS. All of the manned fire lookout towers on the forest are listed as vistas and points of interest. This National Forest is doing a good job of training their fire force and their recreation guards in I&E work. An excellent book of general information on National Forests and of local data, is furnished to all guards for study as an aid in answering questions. Tower guests are welcomed and their visit is made entertaining. This is most certainly an important recreation as well as an I&E feature.

In order to be sure that the towers and their surroundings are as good as is the book of information and for our own I&E - if not for our own recreation - towers, guard cabins and their surroundings will be checked, and if necessary bettered, for at least the following points. Such a check will also be continued in future fire inspections:

1. General appearance: Buildings, corrals, fences, weather stations, flag poles, equipment caches, clothes lines, signs, ground litter, collections of junk, etc.
2. Parking areas: Satisfactory or not?
3. Tower has ladder or steps? In most cases, ladders should be replaced by steps as fast as funds permit.
4. Public toilet needed?
5. Picnic set needed?
6. Preparation and consummation of simple landscape plans.

MINERAL CLAIM HELD FOR CANCELLATION

By decision of the Commissioner of the General Land Office just received, the mining claim of George M. Lobb of Superior, Arizona, which was protested by the Forest Service, has been held for cancellation. Mr. Lobb has held the claim since 1921 and during the past ten years or more has used it principally as a stock holding and watering place. The mineral showing was poor and the Forest Service alleged, among other things, that no valid discovery had been made.

RECREATION

Now is the time of the year for all good men to come to the aid of their party - in this case their own division. For now the plans and job lists that we made this time last year are a past year's business, "done" or "not done". The latter is easy to inventory since we still have it with us. The former is easy to show as gone except that in this day and age a thing can be done gone now and yet in a short time reappear and some day be "done gone come back agin!". Now is the time of year - for all good men to be cautious.

Nevertheless, Recreation and Lands hopes that it really accomplished a few things during 1939. Not to describe but to merely list the major ones are:

Recreation

1. Assisted the forests in the design, construction and erection of 10 forest boundary markers and 35 picnic and campground signs, also in the appearance, materials, colors and placement of many.
2. Secured approval for seven additional summer home areas. Made lot layouts on four of these.
3. Assisted in securing betterment of existing special uses and in the design of new developments on both forest and private lands.
4. Worked on ten landscape plans for administrative improvements.
5. Made or assisted in the making of layout plans for the construction of some twenty-five forest camps, picnic grounds and winter sports areas.
6. Worked on the revision of seven Forest recreation plans.
7. Worked with the Division of I&E on bulletin and news items, recreation information and photographs.

MINERAL APPLICATION REJECTED

Decision of the Acting Under Secretary of the Interior has just been received in the case of Forest Service versus Arthur Curlee of Phoenix, Arizona, claimant to the Rome lode mining claim on the Prescott National Forest some seven miles south of Prescott, holding that there has been no discovery that would authorize the issuance of patent. The hearing, hotly contested, was held at Prescott on November 22 and 23, 1938. The claim was located on July 1, 1927. Relocation was made on April 29, 1935. It was contended by the Forest Service that there was no mineral discovery, that the claim was being held for recreational purposes, and that the relocation in 1935 was across the vein instead of along its linear course. The decision of the Register, dated March 11, 1939 was in favor of the entryman. The decision of the Commissioner of the General Land Office, dated June 12, 1939, held the claim to be valid to the extent of 300 feet on each side of the center line of the vein as originally located. The decision of the Acting Under Secretary, which is the final law of the case, rejects the application for patent in toto. The Forest Service in its brief stated that there was no objection to the entryman continuing to explore the ground in the hope in the future of making a lawful discovery and the Acting Under Secretary holds that his decision denying patent is without prejudice to any possessory right that the claimant may assert to such part of his location extending 300 feet on each side of the center line of a vein or lode upon which a valid and sufficient discovery of mineral by further development has been made, and the right to apply for a patent therefor.

ENGINEERING

SURVEY JOBS COMPLETED

Field work on location of geodetic positions of all lookout points on the Gila N. F. was completed January 1. The work involved the accurate location of approximately 30 triangulation stations. It was accomplished under the WPA program.

Field work on the topographic survey of the Sacramento Division of the Lincoln N.F. has also been completed. This project was started in February, 1934 and has been operating more or less continuously since then, under emergency programs.

Approximately 1,000 square miles were mapped on a scale of 2" to the mile with contour intervals of 50 feet in precipitous country and 20 feet in the country where easier slopes prevail.

Advance sheets of the map have already been used on grazing surveys and for various administrative purposes. This map of the Sacramento Division will be a great benefit to the Forest on account of the various uses in this area and supersedes an old map which had become entirely inadequate.

PENASCO-TRUCHAS WPA ROAD PROJECT

Mr. H. C. Langston, Road Engineer on the Carson National Forest, was a visitor in the FO recently and stated that the Penasco-Truchas road project which is 14 miles in length but is divided into two projects, has been completed from Penasco to Trampas, a distance of 6 miles and that approximately 2 miles of the second section are nearing completion. This project connects with a State highway at the village of Truchas and when the entire distance from Penasco to Espanola has been improved will offer a new road from Espanola to Taos through some of the most primitive settlements in New Mexico. In addition, this project will be of great value in inter-community travel as well as being important in forest administration and fire protection. It will also provide a loop drive from Espanola to Taos via Truchas and Penasco and a return down the Rio Grande or from Espanola through Truchas, Penasco, Mora, Las Vegas and Santa Fe.

In addition to the above the project is furnishing labor to many WPA workers in the immediate vicinity, who are in dire need of employment.

NEW MOUNTING FOR FIRE MAPS

A new method for mounting maps will be tried out when mounting the next fire season's protractor-board maps.

Drafting has been experimenting with several dry mounting processes that promise to be better than any methods used heretofore. One method is mounting with paper lacquer, the other, with parafilm, a wax composition. Either leaves the white background of the map which is impracticable under present methods.

It is also planned to try out a new protractor board made of 1'4" presdwood treated against weather conditions, which is expected to prove more satisfactory than the use of plywood. These boards will be given an aluminum coat except the map side which will be painted white to further eliminate the present objectionable feature of the dark board showing through the map.

1939 WPA ACCOMPLISHMENTS

Accomplishment reports for the C.Y. 1939 show the WPA expended over one half million dollars on Forest Service projects as follows:

Fence Construction

	<u>No. of Projects</u>	<u>Man Months Worked</u>	<u>WPA Funds</u>	<u>Forest Service Contribution</u>
Arizona	2	82	\$ 4,675	\$ 2,314
New Mexico	4	433	24,921	5,979

Road Construction

Arizona	1	509	23,565	9,555
New Mexico	17	6,075	367,568	114,436

Administrative Building Construction

New Mexico	5	840	58,869	18,733
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Top. Surveying - Mapping - Relief Models

New Mexico	3	623	47,336	12,537
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Road Scenic Strip Improvement

New Mexico	1	247	14,007	616
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Prairie Dog and Procupine Control

New Mexico	<u>3</u>	<u>411</u>	<u>21,197</u>	<u>2,530</u>
Total - Ariz.	3	591	33,240	11,869
Total - N. M.	<u>33</u>	<u>8,629</u>	<u>533,898</u>	<u>154,331</u>
Total - Region	<u>36</u>	<u>9,220</u>	<u>\$567,138</u>	<u>\$166,750</u>

RELIEF MODEL MAP LOANED ARMY

The Regional Office of Engineering recently completed a relief model map of the area embracing the country extending eastward from Ft. Huachuca Military Reservation almost to the New Mexico line. According to the Coronado Bulletin, this has been loaned to the 25th Infantry stationed at Ft. Huachuca for use in planning maneuvers in their relation to national defense. In commenting on the map, Col. L. D. Davis said: "Everyone is enthusiastic about it. It is a fine piece of work and exactly suits our specifications." It is reported that the members of the Military Affairs Committee of the House and Senate, who recently inspected Ft. Huachuca, were very much impressed by the map and were high in praise of the work.

WPA PROJECT APPROVED FOR THE CIBOLA

A WPA project has been approved covering a utility building at Magdalena on the Cibola National Forest and work was started the latter part of December. The building will include garage room for two cars, shop, two storage rooms, two stable rooms and two open storage rooms. The building is a dual setup in connection with the two ranger dwellings. The project also will include two small woodsheds, a yard wall, also grading, drainage and landscaping.

INFORMATION AND EDUCATION

LOOKING BACK AT 1939

At least half of the people in the Southwest heard about the Forest Service or saw some part of the National Forests and over 4,000,000 out-of-state people visited or crossed the National Forests of Region Three last year.

Over 60,000 motor trip logs were distributed to the field (the rough drafts having originally been prepared by the field). A distinctive motor trip cover was prepared for each Forest designed to be representative of the individual forest.

A new booklet of the Coconino was received from the Government printing office. This takes the place of the old Forest folder. Also material for booklets covering the Apache and Prescott has been prepared.

A Coronado Centennial booklet entitled "Short Trips on National Forests in the Land of Coronado" has also been completed and is with the printer.

The office of I&E has issued weekly during the fishing season a release to newspapers and radio stations on fishing conditions of the various streams in and adjacent to the National Forests, the data being furnished by the field. These have been very popular with sportsmen.

During the winter months in cooperation with the Weather Bureau, snow conditions at winter sports areas are furnished by the field and a weekly release prepared which is distributed to papers and radio stations throughout the Southwest.

In June the Grantland Rice Sportslight photographers, with Ted Husing, Columbia's Commentator and other celebrities, in cooperation with the Transcontinental Western Airways selected the Pecos on the Santa Fe National Forest as a location for fishing pictures. These show the feasibility of Eastern parties reaching western fishing grounds in a few hours time by plane. Bob Edge, Columbia Sports commentator gave his regular Thursday broadcast from the banks of the Pecos stream with Governor John E. Miles, Ted Husing, Ranger Johnson and several others being interviewed by Mr. Edge.

While the I&E photo library has many prints, there has been a shortage of pictures suitable for the illustration of articles and last summer Mr. W. H. Shaffer, Washington photographer, spent a month in the Region during which time he visited most of the Forests. This resulted in an addition of over 400 good prints to our collection.

Then this fall Mr. Davis, photographer for the New Mexico Tourist Bureau, visited the Carson, Santa Fe, Cibola, and Lincoln National Forests in order to get pictures of Forest activities and scenery for use by the Bureau in their publicity work. Mr. Davis also took over 3,000 feet of colored film.

"Ignitze" The Fire Monster, was shown at a number of places in 1939 and received a considerable amount of attention from fire protective associations and was the subject of an illustration in "The Volunteer Fireman", house organ of the National Fire Protective Association. Last fall, as "Ignitze" had made the rounds of R-3 pretty well he was shipped to Region 8 which had learned of him through the Washington Office and was interested in using him in a fire prevention campaign.

Several attractive exhibits and window displays were made in the RO and a number of window displays were prepared by individual forests which were very well received by the public.

The personnel in the field have been active in making valuable contacts during the past year and this worth while work will probably be increased this coming year.

NEW MEXICO ADVERTISES THEM

"Cool and green are the great National Forests of the high country." That's the heading above a two-page spread in the New Mexico State Tourist Bureau's newest booklet, "New Mexico, Land of Enchantment."

The two pages are occupied mostly by photographs of striking beauty. They show Red River Canyon, a camping party, Santa Fe lake, skiing, and a pack-train nearing timber-line.

"Over eight million acres of New Mexico's mountains and foothills are set aside into seven National Forests which are scattered throughout the State," the text states in part.

Forest Service photos are also used in other sections of the booklet, which deal with hunting and fishing, camera hobby, history, etc. A map in the center shows National Forests in color.

The recognition was not "happenstance" -- I&E learned about plans for the booklet last year, through routine cooperation with the Ward Hicks advertising agency, Albuquerque. Offer of assistance in the form of photographs and data was accepted by them.

ROBERT F. COPPLE VISITS RO

Robert F. Copple of the Soil Conservation Service with headquarters at Lincoln, Nebraska, was an RO visitor on November 29. Bob entered the Service in R-3 in 1921 and worked on the Jornada, Santa Fe, Carson, Apache and Southwestern Forest and Range Experiment Station, leaving in 1929 to return to school. In 1930 he was transferred to the Bureau of Plant Industry where he remained for several years, finally transferring to the SCS.

FOREST OFFICERS IN PRINT

In the August issue of "Peoples Magazine of Arizona," John C. McNulty, Assistant Forest Supervisor of the Prescott National Forest, has an article entitled, "Forests." Recreation developments on the Prescott are described in a very interesting manner.

In the same issue Robert F. Kelleher of I&E has an article entitled, "On Guard Ranger" which is full of good fire prevention material.

JACOB LAKE LOOKOUT TOWER POPULAR WITH VISITORS

In checking the visitors' register for the Jacob Lake Lookout tower on the Kaibab it is found that 1,271 visitors registered during the period May 5 to August 28 and it is estimated that at least 100 additional visitors climbed the 100 foot tower after the fire season closed. Visitors from 38 states, the District of Columbia and six foreign countries were included in the registration.

A Forest Service lookout man stationed at a lookout which is accessible by automobile usually has an opportunity to do some excellent I&E work during his period of employment.

NEW BOOK ON LIFE OF A FOREST RANGER

"Green Kingdom", The Way of Life of a Forest Ranger, by William Atherton Du Puy is just off the press. This is the first in a series of vocational guidance books called The Way of Life Series, which will probably eventually reach 100 books in number.

EDUCATIONAL WORK BY B. F. KERR

Bailey F. Kerr, Executive Assistant on the Lincoln National Forest, on November 3 gave a brief outline of the work of the U. S. Forest Service before twenty members of the Junior Woman's Club of Alamogordo and also spoke on prevention of forest fires to thirty-five members of the Seventh Grade school children.

NEWS FROM THE ARIZONA SNOW BOWL

A letter from the Coconino states that the annual ski meet will be held at the Arizona Snow Bowl on February 24 and 25.

The 20-30 Club held its annual state convention in Flagstaff February 11 and 12 and provided some time to take advantage of the winter sports area.

The Rotary Club of Phoenix planned a trip by special train from Phoenix to Flagstaff for skiing on January 19.

A ski club is being organized in Phoenix and plans are being made to have a special ski train from Phoenix to Flagstaff each week end.

ANCONA HEADS SCOUT COUNCIL

Ed Ancona, CCG Administrative Officer, was honored last November by election to chairmanship of the Northern New Mexico Council, Boy Scouts of America, at the Council's annual meeting in Santa Fe. The advancement climaxes many years of service on his part to the Council, especially in the field of camping and outdoor work. The Council covers thirteen counties in the northern part of the State.

MOTION PICTURES ACCOMPANY FOREST TALK BEFORE AMERICAN LEGION

C. R. Dwire and F. L. McCament of I&E attended a meeting of the Carlisle Post of the American Legion the evening of January 15. Dwire presented the Forest Service Short Range program which was endorsed by a resolution and McCament presented the Forest Service picture, "Winter Wonderland." About 100 members of the Post were present.

A TRAIL RIDER LOOKS BACK

In the December number of "American Forests" Dr. Edward P. Boller of Alhambra, California has a short article, a part of which is quoted. "I have just finished my first day at the office after my tour of active duty with the Officers Reserve Corps of the U. S. Army, and in addition the most wonderful vacation that any person could possibly wish for. I really do not intend to exaggerate but that is truly how I feel regarding my stay in the Gila Wilderness (New Mexico), this summer with The American Forestry Association's Trail Riders of the Wilderness.... My vacations to come are going to lean most strongly toward Trail Rider expeditions."

MRS. JONES OF I&E SPEAKS AT EUGENE FIELD SCHOOL

Mrs. Irene Jones of I&E spoke on November 14 before the pupils of the fifth and sixth grades of the Eugene Field School on the subject, "The Work of the Forest Service". Mrs. Jones spoke before this group the previous year and her talk went over so well that she was requested to appear again.

FORMAL OPENING OF PANCHUELA SKI AREA SUNDAY

On January 14 the Pecos River Sportsman Club inaugurated the new Panchuela ski area in the Santa Fe National Forest near Cowles. During the past fall the Forest Service cleared a practice hill and remodeled the old Panchuela Ranger Station guest house to serve as a shelter building.

The principal attraction of the area is the extensive network of trails leading into the tremendous snow covered Pecos Wilderness Area of the Santa Fe National Forest and it is expected that one of the principal uses of the area will be for ski touring parties.

C. C. C.

ROBERT FECHNER, CCC DIRECTOR

Tuesday afternoon, January 2, while flags rested at half mast at the CCC camps throughout the Nation, and with the U.S. Army, the Army band, and many prominent national figures paying due honor to his memory, six CCC enrollees, clad in the new spruce-green uniforms recently approved by CCC Director Robert Fechner, carried the director to his last resting place at Arlington National Cemetery.

Mr. Fechner, died Sunday, December 31, at the Army medical center, Washinton, D. C., at the age of 63 years. Much of the time during many months past he had directed the activities of the Corps from his hospital bed, just as nearly seven years ago from a sick bed in a Washington hotel he directed the organization of the CCC and ever since had been its capable and enthusiastic leader.

During the Spanish-American War Mr. Fechner served with the Second Georgia infantry. For more than 40 years he was a prominent figure in labor circles. In 1901 and again in 1915 he was a leader in the nine-hour and eight-hour labor movements, respectively. He had an active part in settling labor disputes in various factories manufacturing war materials during the World War.

Few better qualified men could have been chosen to head up the first and greatest emergency relief effort ever attempted by any administration. Few could have done a better job in formulating its praise-worthy objectives and in making them materialize. Few could have been a better friend to enrollee and employee, with their interests always at heart. Few can take his place.

What more can be said than "A good job well done"?

For a government "emergency" program the CCC in Region 3 sailed along on a rather even keel during the calendar year 1939.

The quotes are used around the word emergency advisedly since the spring of this year saw the CCC celebrate its sixth anniversary and before the year closed a large portion of its seventh year's record was in the bag.

By even keel is meant a high degree of stability in the plans and procedures of the work without interjection of expansions, contractions, swaps of corps area companies, inter-region moves of companies and such affairs that cropped up to more or less degree in most of the previous years. In a word, the CCC job showed signs of maturity and stability.

Not necessarily a complacent, fat, middle-aged maturity because the CCC is essentially a movement of youth and as such it must keep young in all its joints; rather a freedom from growing pains which permitted more attention to the main task at hand--the work projects and the development of the enrollees.

The Region continued throughout the year with 19 camps. Continuing the effective inter-seasonal move policy followed in the Region since the beginning of the program fourteen of the camps moved between winter and summer locations, thus spreading the benefits of CCC work to the widest degree possible with the comparatively few camps the Region had at its disposal.

Three new summer camps were constructed for the 13th period -- the summer period of 1939. These camps will permit more flexible inter-seasonal moves. Also constructed in the same period was one new winter barracks camp at Chevalon Canyon on the Sitgreaves. Late in the year two new summer type camps were authorized for northern New Mexico and construction started to permit completion of the camps for 15th (summer of 1940) occupancy. Also a new camp was authorized to replace old F-5-A (Flagstaff) which has been occupied every summer period since 1933. This new camp will be built in time for summer occupancy in 1940. The new camps are all portable and the design of the buildings is much improved over early construction.

During the year definite advancement was made in training methods in the camps through emphasis on participation of all the foremen personnel in the job training work and utilization of good ideas developed in the field.

The accomplishments for the year rolled up the usual impressive units of work. To mention a few of the larger jobs: 263 miles of truck trails, 21 bridges, over 100,000 rods of range fence, 204 miles of telephone line, 14,000 man-days on various types of soil erosion control projects, over 10,000 man-days on nursery and planting projects, nearly 10,000 man-days fighting forest fires and nearly a like amount of time on fire prevention and presuppression activities; and a further extension of the recreation facilities on many picnic and campgrounds.

Altogether the 19 camps in the Region's 13 National Forests recorded 668,000 man-days of construction and maintenance work under 93 different statistical headings or types of jobs.

Shades of Paul Bunyan!

JOB TRAINING IN CAMP F-24-N

H. E. Allen, Junior Forester F-24-N has submitted an interesting article on job training, a part of which follows:

"During a recent visit to this Camp, Ted Bonner sold us the idea of Teacher Training as an answer to the ever-present problem of classroom interest and lesson preparation by the instructor. There followed then a course in Teacher Training given by E. V. Manning our Educational Adviser. Having finished the course in two weeks and becoming full fledged teachers we were now ready to solve the classroom problems. Mr. Manning suggested the idea of writing an outline for each lesson and having a lesson plan prepared for same. The outlines were mimeographed in sufficient quantities so that each member of the class would have one. The procedure is to hand out to each member of the class an outline for him to read over and study. Fifteen or twenty minutes is allowed for this purpose, after which the instructor, armed with his lesson plan, proceeds with the teaching of the lesson. Outlines are collected at the end of each lesson.

"The results of this method of teaching are very satisfactory both from the teacher's point of view as well as the enrollees. There is no lack of classroom interest and the students know something about what the instructor is trying to teach. This alone bridges a wide gap which has heretofore been a hard task for untrained instructors.

"Supplementing these outlines are a series of Kodachrome slides showing the various stages of work. These pictures were made on the job at the time the different stages of construction took place."

A SAFETY RECORD

L. R. Elmore, Project Superintendent Camp F-35-A, reports that:

"During the six day period that seven year old Bruce Crozier of Winslow, Arizona was lost near Promontory Butte, there were approximately 2,000 CCC man days spent in the search without an accident of any kind. There was not even so much as a sprained ankle or blistered heel so far as we could find out, which goes to show the fitness and physical condition of the CCC boys compared to the average civilian who was on the hunt at the same time. Civilians would hobble into camp at night with sprained ankles and blistered feet barely able to move while the CCC boys, after a few hours rest, were ready to go again.

"Doctor Dryer of Camp F-35-A was stationed at the main camp the first four days of the search and the Doctor from Camp F-78-A the last two days. Both will bear me out in the above statement and their first aid treatment was administered solely to civilians."

CABIN AT WATER CANYON

An overnight cabin is to be constructed in Water Canyon on the Cibola National Forest. It will consist of two rooms and will be constructed of native stone. The cabin will be used by the District Ranger when working in that part of his district and may also be used as a checking station during the hunting season. CCC boys will do the construction work. The boys will also construct a horse shelter and small feed room at the pasture located two miles west of Magdalena where the horses of the Magdalena Rangers are pastured.

CCC TRAINING

Supt. Tom Flannagan, F-41-A was detailed to the RO for three days in December to assist in the reviewing of lesson plans on fence construction and the formation of a model plan on that subject. In the near future the model plan will be sent to the field where each camp will make up the plans for one topic and exchange plans with the other camps.

C. Y. 1939 ACCOMPLISHMENTS - CCC

ACTIVITY	Unit	Constr.	Maint.	ARIZONA	NEW MEXICO	R-3 TOTAL
Truck Trails	Miles	150.2	1215.3	113.1	2513	3728.3
Bridges, vehicle	No.	2	12	14	9	21
Horse Trails	Miles	54.1	94.5	7.9	37	131.5
Telephone Lines	Miles	53.6	267	150.8	683.5	950.5
Ponds, fish and bird	No.	1			1	
Fish Stream Imp.	Miles	12.2	2	1.1	8.3	13.3
Range and other fences	Miles	135.1	86	187.1	143.6	229.6
Water development	No.	90	16	59	49	65
Pipe Lines	Lin.Ft.	7635	2560	7885		15520
Corrals	No.	8		2		10
Range revegetation	Acres	38		533		571
Eradication Poisonous Plants	Acres	50		40		90
Estimating timber resources	Acres	660				660
Stock driveways	Miles	9				9
Rodent Control	Acres	2020		160		2240
Timber Stand Imp.	Acres	370		252		629
Tree Disease Control	Acres	149		20		169
Tree Insect Control	Acres	620				620
Dams, Erosion Control	No.	2178		6761	64	8955
Recreation Camp Grounds	Acres	51	166	50	340	101
Recreation Structures	No.	676	133	215	145	891
Fire Breaks	miles			3		3
Admin. Bldgs. Barns & Dwellings	No.	10	20		12	10
" " Small	No.	18	16	10	26	28
Lockout Houses and Towers	No.	1	2	1	3	2
Fire Suppression	Man-days	5141		4542		5683
Total enrollee man-days		320564	33582	258692	35096	579256
						68678

FISCAL CONTROL

RECEIPTS AND DISBURSEMENTS

There is given below a very brief summary of receipts and disbursements as handled by this Division for the fiscal year 1939 as compared to the fiscal year 1938 preceding:

	<u>Timber</u>	<u>Grazing</u>	<u>Land</u>	<u>Other</u>	<u>Land Exchange</u>	<u>Total</u>
Receipts, F.Y. 1939	\$166,296	\$255,926	\$32,945	\$682	\$30,965	\$436,814
" F.Y. 1938	226,553	280,586	34,222	639	34,264	576,264

Expenditures:

	<u>Regular</u>	<u>CCC</u>	<u>ERA</u>	<u>Total</u>
F.Y. 1939	\$1,526,986	\$ 874,722	\$385,110	\$2,846,818
F.Y. 1938	1,464,543	1,132,764	564,807	3,162,114

There was a marked decline in timber sale business. Grazing was adversely affected by market conditions, which in turn were reflected in grazing rates. The statement of expenditures indicates a decline in CCC and ERA and an increase in regular funds disbursements, with a net decrease in total of \$315,296.

Fiscal audits were made during the calendar year 1939 of all Forest Supervisors' offices in the region, and in connection therewith an audit of a ranger station and CCC camp office on each Forest in most cases. It is believed that these audits have been very beneficial in many ways, particularly so in permitting discussions on procedure, which during recent years has broadened to cover a wider field with the increased activities of the Service.

On January 1, 1940, the bookkeeping work of two forests - Carson and Sitgreaves was transferred from the Supervisors' offices of those two forests into the Regional Fiscal Agent's office. Plans preliminary to the transfer were worked up during December, 1939. The transfer of this work for these two forests is the initial step towards eventually transferring all bookkeeping work of each Supervisor's office to the Regional Office, Division of Fiscal Control. This work will be done by machine accounting methods.

Contacts at frequent intervals were made during the year with the Finance Officer, U. S. Army, Fort Bliss, Texas, and the Treasury Accounts Office, Santa Fe, New Mexico. These two offices pay our CCC and ERA accounts, respectively, and have cooperated in an excellent manner in the prompt handling of accounts under these programs.

Regional Fiscal Agent Albert Morris was called to Washington December 1 for a two months' detail in the Chief's Office, Division of Fiscal Control.

PIONEER'S PAGE

BORN THIRTY YEARS TOO SOON (By H. C. Longston)

I have just finished reading a press dispatch to the effect that the ski tow at La Madera had been completed and was in good working order. About that time the radio out of KOB announced that the ski tow at the Agua Piedra ski run was nearing completion.

Shades of Olaf Christensen!!!

Things have come to a pretty pass, folks, when even Forest Rangers have got to be pulled up a hill so they can slide back down again! Which reminds me --

It was the winter of 1912 on the old Battlement National Forest in Colorado that Forest Supervisor John W. Lowell decided that the time was ripe to make a timber reconnaissance on top of the Grand Mesa. This Grand Mesa, by the way, for those not familiar with the mountain, is a flat top mountain about 50 miles in length, 15 miles across, standing at an elevation of 10,500 feet, located in western Colorado. It is capped by a lava rock escarpment nearly vertical and approximately 500 feet high. At the foot of this mountain was the old Coon Creek Ranger Station. At Mesa Lakes, eleven miles away and 5,000 feet up, was the Mesa Lake Ranger Station. This latter station was to be our base of operations. The crew consisted of old-time rangers, James Cayton, Boone Robinson, along with rookies Arthur McDuffey, Forest Assistant Mason, and myself.

We hired a team and sled, loaded on our beds and a bunch of chuck, said so-long to our wives (there were no kids then) and headed for Coon Creek Ranger Station, where we arrived without mishap. The next day we contrived sleds out of our skis, loaded them with our beds, enough grub for one night's stay, and took off. As mentioned before the distance to the Mesa Lake Ranger Station where we were headed was eleven miles and plenty steep. Each man was pulling a good hundred pounds. Due to severe nose bleed, one of the crew fell by the wayside. We left a man with him and the rest of us pushed on. We reached the Mesa Lake Ranger Station, 9,500 feet elevation, after dark. Snow was ten feet deep on the level. We were forced to dig down to the door of the cabin in order to gain entrance. However, provision had been made beforehand for this occupancy in the way of wood and kindling. We built a fire, and two of us went back after the casualty. We took over the load and got him safely into camp. Next morning Cayton, Robinson and myself were elected to return to Coon Creek after the rest of the grub. We tied our Bearpaws on our backs and took off, the old-timers in the lead and me bringing up the drags.

There are two things about that return trip that I'll never forget. The elapsed time in which we made the run to the Cook Creek Station (20 minutes) and a bunch of young aspen that got in my way. I mowed a swath down through those young trees wide enough to drive a chuck wagon through. Those I didn't snap off even with the crusted snow, I straddled and peeled slicker than bamboo fishing poles.

Back to the camp that night with another ski-sled load. Twenty minutes down - ten hours back.

The following morning old-timers Cayton and Robinson gave us a lecture on how to protect our faces from snow which, from their version, was to black our faces with soot and charcoal and of course we had dark

glasses. Only one member of the party failed to take this advice and developed serious burns from the snow and wind. Immediately after this lecture, we mounted our webs, shouldered our packs, and trailing our skis behind us, wormed our way up over the caprock to the summit, where the snow was 13 feet deep on a level. There we changed from webs to skis and took off out across the flat top mountain to the scene of our operations. You may stop here and wonder how it was possible for us to do reconnaissance work in snow 13 feet deep, and well you may. We did, however, manage to get a fairly accurate map of timbered areas and an effort was made to get a few d.b.h.'s even though they were rather high.

On our return trip that evening, Ranger Robinson was in the lead, as usual, closely followed by Cayton, the rest of us bringing up the drags. Robinson cut straight through to the edge of the caprock. At the point where we reached it, snow had blown and drifted so that a cornice was formed at the edge of the cliff. This cornice extended out about 30 feet and then broke abruptly to the steep slopes of the cap, which were about 80%. At the foot of the cap and 500 feet below us was Lost Lake, the surface of which was a smooth outline of white, indicating to our eyes that it was completely frozen over. Robinson, turning around, looked at the rest of us and grinned:

"What about it, fellows? Shall we go straight down?"

Old-timer Cayton grinned right back at him and said, "Sure, its the shortest way to camp." The rest of us just looked at each other.

"All right", said Boone. "I'll go in the lead - the rest of you fellows fall in behind."

Cayton stepped up behind him, and I believe McDuffey was next. Mason was so far back I couldn't help but fall in behind McDuffey. Robinson spoke to Cayton and said, "I'm going to ride 'em straight up. Can you follow?"

Jim said, "I can go anywhere you can".

Riding straight up meant that we would not ride our sticks but hold them above our heads as we went down. In those days we did not have the new-fangled bamboo pole with a steering wheel on the end to push us along, but had cut stout saplings and seasoned them for the purpose. As for me I had no intention of trying to "ride 'er straight up".

Robinson let out a bellow that sounded like "Lesgo" and shoved off. When he was 50 or 60 feet off, Cayton raised his stick above his head and followed suit. McDuffey was next, and I followed, both of us straddling our sticks and bearing down hard. Just as I tipped off the edge I glanced ahead and saw Boone Robinson had arrived at the bottom - and disappeared! My heart went up in my throat as Cayton swerved to miss Robinson, and he, too disappeared! The thought entered my mind that a hidden air hole was in the lake, and we were all headed for Davey Jones' locker. McDuffey, seeing all this, got scared and threw himself in order to stop, which by the way did him little good because of the crust on the slope. I bore down so heavy on my stick it broke right in the middle. I didn't have to throw myself after that. I was spread out all over the slope. A pack sack strapped to my back contained sketch board, compass, and a few other knickknacks. On top of that was strapped my webs - and on top of that was me, spinning around on webs attached to my shoulder blades. The next thing I knew I was under about ten feet of powdered snow, mixed up with McDuffey, and not far away we could hear the growls of Cayton and Robinson. Mason, having seen what happened and using good judgment, had backed up and felt his way around until he found where we had come up that morning.

What had happened was that heavy winds which blow constantly during the winter at this altitude had drifted fine snow over the caprock, piling it up on the lake. The snow was so fine and so light, it would not carry a

person even on webs. We disengaged ourselves from our skis and worked our way out through the light, fluffy snow to the opposite shore of the lake. Our clothes from the waist down were saturated with melted snow and before we had gone far had frozen except at our knees and hips. The thermometer had been standing at 25 below zero for the past two nights, and the next morning it was 35 below.

We kept this work up for two weeks, climbing the caprock each morning; changing from webs to skis and from skis back to webs.

As to the worthwhileness of this work it was said that a timber man from the old D. O. at Denver, after looking over some of the data, turned to Supervisor Lowell and remarked:

"Lowell, I don't think much of that timber on top of the Mesa, but I sure would be delighted to meet a ranger that's capable of standing flat-footed and measuring a d.b.h. 13 feet high."

Times do change, AND HOW!!

(Mr. Langston was with the Service in R-2 from 1908 to 1917. He is now truck trail engineer on the Carson National Forest).

FORMER R-3 FOREST OFFICER PASSES AWAY

Word has been received of the death of James H. Billingslea Jr. on November 6 following an operation. He served as Forest Ranger on the Apache under Supervisor Fred Winn from 1916 to 1917 when he enlisted in Company C. 10th Engineers for service over seas. After returning from the Army Mr. Billingslea received appointment in R-6.

CHARLES N. LOCHMAN RETIRES

Charles N. Lockman, forest ranger and for many years assigned to improvement work on the Coconino retired December 31. He reached his 62nd birthday on December 13. At a farewell party given by Supervisor Hussey on December 16 his associates presented him with a 100 ft. steel tape. It is understood that the tape will occupy the place of honor in Charley's home carpenter shop. He plans to remain in Flagstaff and continue doing carpenter work. Later he will probably go to Florida where he owns a ten acre tract of land to oversee its development. We are betting, however, that most of the time his hat will be hung in the shadow of the "Peaks".

Good luck and best wishes Charley from all your friends in the Region.

LEO ANDERSON PRESENTED WITH FAREWELL PRESENT

On December 4, when Leo Anderson was making a usual call at the office for his mail, the office force of the Tonto assembled and surprised him by presenting him with the Hamilton watch for which contributions were made by the personnel (field as well as office). His own special type of connected initials were engraved on the watch, "LEA Tonto 12/31/39". This caught Leo by surprise but his appreciation of being remembered in that way was evident.

RHINEHART RETURNS TO SOUTHWEST

A letter has been received from "Rhiney" stating that he is now in El Paso stopping at the Linden Hotel, after spending six weeks in Mississippi. He states that the South is doing its part in Forestry with the growth of Long Leaf Pine and that there is not so much burning now as formerly existed.

Mr. Rhinehart spent Christmas with his mother who is now 96 years old and enjoying good health, but he adds that hot biscuits may get her yet. He has had a medical checking and has been pronounced in good shape - says he still gets up early, walks a lot and that while in the South he really worked - picking pecans and patching up around the old home.

SECRETARY'S LETTER OF FEBRUARY 1, 1905

In the memorandum covering Staff Meeting No. 143, Region Two, a photostat copy of former Secretary James Wilson's letter to the Forester, laying down the policy of the administration, is quoted in part and is well worth re-reading:

"In the administration of the forest reserves it must be clearly borne in mind that all land is to be devoted to its most productive use for the permanent good of the whole people and not for the temporary benefit of individuals or companies. All the resources of forest reserves are for use, and this use must be brought about in a thoroughly prompt and businesslike manner, under such restrictions only as will insure the permanence of these resources. The vital importance of forest reserves to the great industries of the western states will be largely increased in the near future by the continued steady advance in settlement and development. The permanence of the resources of the reserves is therefore indispensable to continued prosperity, and the policy of this Department for their protection and use will invariably be guided by this fact, always bearing in mind that the conservative use of these resources in no way conflicts with their permanent value. You will see to it that the water, wood and forage of the reserves are conserved and wisely used for the benefit of the homebuilder first of all: upon whom depends the best permanent use of lands and resources alike. The continued prosperity of the agricultural, lumbering, mining and livestock interests is directly dependent upon a permanent and accessible supply of water, wood and forage, as well as upon the present and future use of these resources under businesslike regulations, enforced with promptness, effectiveness, and common sense. In the management of each reserve local questions will be decided upon local grounds; the dominant industry will be considered first, but with as little restriction to minor industries as may be possible; sudden changes in industrial conditions will be avoided by gradual adjustment after due notice; and where conflicting interests must be reconciled, the question will always be decided from the standpoint of the greatest good of the greatest number in the long run.

"These general principles will govern in the protection and use of the water supply, in the disposal of timber and wood, in the use of the range, and in all other matters connected with the management of the reserves. They can be successfully applied only when the administration of each reserve is left very largely in the hands of the local officers, under the eye of thoroughly trained and competent inspectors."

CORONADO'S TRAIL

Mr. C. W. McKenzie of the RO has secured copies of a very interesting writeup by John D. Guthrie written in May, 1926 and used at the dedication of the Clifton-Springerville road in June of that year.

Mr. Guthrie states that seventeen years before, District Engineer Jones of the Forest Service in Albuquerque, Forest Ranger, David Rudd of the Apache and himself, then Forest Supervisor of the Apache, started out of Clifton on a road reconnaissance of the route. He goes on to state that as far as he knows that was the first road reconnaissance of this route since Coronado and his followers passed that way in 1540. The following year, 1910, another reconnaissance was made by Engineer Howard B. Waha and party.

Mr. Guthrie ends the article with, "We of our three centuries later are now opening again that old historic route as 'Coronado's Trail', perhaps one of the most historic trails in all America, in a state teeming with history and romance of the early days of this country, a region that was having its history written one hundred years before Jamestown or Plymouth Rock were heard of."

